

ORIGINAL

Before The
Federal Communications Commission
Washington, D.C. 20554

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Federal Communications Commission
Office of the Secretary

In the Matter of)
Dell Inc.)
LG Electronics USA, Inc.)
Hauppauge Computer Works, Inc.)
Requests for Waiver of Certain TV Tuner)
Requirements In Order to Import and)
Distribute Mobile DTV Receivers Without)
Analog Tuners)

MB Docket No. 10- 111

Comments

Hauppauge Computer Works, Inc. ("Hauppauge"), by its attorneys, hereby submits these Comments in the above-captioned proceeding. Hauppauge's Petition for Waiver of Section 15.117 of the Commission's Rules to permit the unrestricted manufacture, importation, marketing, distribution and sale of *mobile* television receivers (such as for cell phones, personal digital assistants (PDAs), notebooks and laptop computers) that contain digital only TV tuners was filed on May 19, 2010 ("Hauppauge Petition"). As noted there, Hauppauge supported a similar petition filed by Dell Inc. and LG Electronics USA, Inc. on May 12, 2010 ("Dell/LG Petition"). Both Petitions demonstrate that the proposed waivers will serve the public interest, will broaden consumer access to new video options and local news, entertainment and emergency programming, and should be granted as soon as possible.

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I. Urgent Agency Action Needed

Hauppauge again emphasizes the critical importance of a prompt and unrestricted decision by the Commission if the type of products the American consumer expects to see in coming months is to be produced in sufficient time to meet the demands of the market. As the Commission recognized in the Public Notice establishing this proceeding, “manufacturers need ...sufficient lead time to develop products for release to market.”¹ Thus, if American consumers are to receive the benefits of this innovative *mobile* technology in a time-frame that they expect, and deserve, immediate favorable action on the petitions is necessary and warranted.²

II. Grant of the Waivers Is Decidedly In the Public Interest.³

Simply stated, Hauppauge’s position is that *digital TV receivers, or the TV tuner components of a digital TV receiver (whether internal or external to the receiver monitor), which are primarily battery powered and designed for nomadic use, should be exempt from any obligation under the Commission's Rules, including Section 15.117, to also include analog TV tuners.*⁴ Even if the Commission is unsure whether Section 15.117 requires such a pairing in the wake of the completion of the full-power television digital transition in June 2009, legal precedent most certainly supports targeted waivers of such an outmoded mandate when the underlying purpose of the rule is not served by its enforcement and where the public interest is

¹ Public Notice, DA 10-873, May 20, 2010 at 2.

² See Declaration of Kenneth Plotkin, CEO of Hauppauge, Exhibit 1 at 2 (“Plotkin Declaration”).

³ The Hauppauge Petition (at 2-5) adequately demonstrates the legal basis for favorable Commission consideration of the two pending waiver requests.

⁴ This is the appropriate definition of a “mobile device” for purposes of the instant waiver proceeding. To this point, Section 303(s) of the Communications Act does not compel the Commission to mandate the inclusion of any sort of analog television tuner; rather, the plain text of Section 303(s) affords the Commission discretionary authority to regulate apparatus designed to receive television pictures (and implicitly in a manner consistent with the public interest). See 47 U.S.C. § 303(s).

clearly served by its exception.⁵ This is precisely such a case.

A rigid and outmoded federal obligation to append an analog TV tuner to every mobile digital TV tuner in portable or handheld devices⁶ is very likely to constrain or deny millions of consumers the many benefits of mobile access to free and local digital television programming for any number of reasons, including:

- analog TV receivers are power-hungry and impose severe disadvantages in terms of battery life;⁷
- including an analog TV tuner in cell phones will increase their size, thus seriously constraining their marketability;⁸
- mandated analog TV tuners in receivers will add unnecessary costs to each portable device, which will deter consumer adoption of such devices;⁹ and
- analog TV tuners cannot be accommodated into the digital TV antennas being built into the digital TV tuner USB devices.¹⁰

But the reasons to approve the waiver are not simply that new and innovative consumer mobile devices should not have to be burdened with spectrum hogging, power hungry analog TV tuners that no one wants to use. The Commission should also approve the requested waivers because there is no reason to believe that the addition of analog TV tuners in these mobile devices -- which are limited to small antennas and are intended to be used in challenging reception

⁵ *WAIT Radio v. Federal Communications Commission*, 418 F.2d 1153, 1157 (D.C. Cir. 1969). affirmed *WAIT Radio v. FCC*, 459 F. 2d 1203 (DC Cir 1972), cert. den. 93 S. Ct. 461 (1972).

⁶ The Hauppauge Petition at 3-4 illustrates why any more burdensome view of the regulatory obligations related to the interstate shipment of mobile TV receivers lacks merit.

⁷ Plotkin Declaration, Exhibit 1 at 2. An analog receiver has much higher CPU requirements than digital: ATSC digital TV is broadcast at 19.2 Mbits/sec; analog comes out of the A/D converter at 216 Mbits/sec -- a ten-fold processing/throughput increase that results in a far higher drain on a mobile unit's battery.

⁸ Exhibit 1 at 2.

⁹ Id.

¹⁰ Id.

conditions ranging from traditional interference zones to high speeds -- would offer consumers any actual reception of the relatively few analog signals still remaining in the United States.¹¹

While the use of internal digital TV tuner modules in portable devices such as cell phones is easily understood, the use of external USB TV tuner devices has a similar but not as well understood usage model. USB based digital TV tuner modules are primarily used by PC users who are mobile and want to watch live broadcast TV when they travel. We call this the 'Starbucks' model: a mobile PC user goes to a coffee shop, they open their laptop or notebook computer to check e-mail or surf the net, and they plug in a USB digital TV tuner so that they can watch live broadcast TV on their notebook screen. The Hauppauge USB digital TV tuner devices are designed to meet this consumer use (and, at the same time, it also satisfies parallel uses for travel on buses, trains and in automobiles). The requirements for these USB TV tuner modules are the same as for internal digital TV tuner modules: they need low power to extend the battery life of the notebook computer; they need to be small in size to make them easier to carry; and they need to support a small portable TV antenna. Hauppauge Computer has under development a new line of digital only USB TV tuners which meet these requirements. Any requirement for companion analog TV tuners in such devices would deprive the American public of a valuable new technology. On the other hand, grant of a waiver which includes internal as well as external digital only TV tuners, would give American consumers access to an exciting new TV technology on both new and existing portable devices.

The proposed waivers would also advance other public interest goals of the Commission. First, the waivers (and the equipment they will allow to be produced) enable more efficient use of the spectrum. At a time where there has been concern about cell phone users consuming large

¹¹ There is no equivalent NTSC M/H standard. Plotkin Declaration, Exhibit 1 at 2.

portions of network bandwidth by watching videos through wireless Internet connections, the FCC can alleviate spectrum congestion by encouraging live broadcast TV usage unhampered by outmoded requirements (analog TV tuners) that serve a very limited, if any, purpose in a mobile environment. Unlike video streaming via point-to-point Internet transmissions, digital television that is broadcast to mobile or handheld devices can deliver video to a potentially unlimited number of users at the same time. These users can view widely popular and live video without any additional spectrum congestion.¹²

Second, the waivers and the resulting devices will increase consumer access to free and local video programming, which will broaden the news, entertainment, and information choices, including local emergency information, available to consumers.¹³ In particular, because broadcasters have long been a reliable source of local emergency information, the extension of such programming to mobile applications is an obvious consumer benefit of broader access to mobile digital products.¹⁴

Thus, the public interest calculus overwhelmingly favors the conclusion that analog tuners should not be required in portable digital TV receivers that are *primarily battery powered*

¹² The Commission's own National Broadband Plan agrees: "emerging broadcast applications, such as mobile DTV . . . , may provide an opportunity to take advantage of the relative efficiencies of point-to-multipoint . . . architectures in order to deliver various types of content in the most spectrum-efficient ways." Federal Communications Commission, "Connecting America: The National Broadband Plan," Report to Congress at 89 (released March 16, 2010) (available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296935A1.pdf) (last viewed May 28, 2010).

¹³ "Mobile Digital Television Efficiently Uses Broadcast Spectrum for Critical Delivery of Live, Local Information and Emergency Alerts on Mobile Devices," Press Release, Open Mobile Video Coalition (released March 17, 2010) (available as of May 27, 2010 at <http://www.omvc.org/media-relations/press-releases/>).

¹⁴ See, e.g., Carolyn Schuk, "Over-the-air Mobile TV Essential Part of Emergency Communications, OMVC Says" (released April 7, 2010) (discussing OMVC study in support of broad over-the-air mobile TV access) (available at <http://broadcastengineering.com/RF/archive/over-air-mobile-tv-0407/>) (last viewed May 27, 2010).

and *designed for nomadic use* whether such TV receivers contain digital TV tuners internal or external to the reception device.¹⁵

III. CONCLUSION

By sensibly reinterpreting Section 15.117 in light of the Commission's own mandate for full-power television stations to terminate analog operations, the FCC will

- Encourage efficient spectrum use;
- Permit greater consumer access to live local TV programming, emergency broadcasts and other important public safety programs; and
- Reduce the price and complexity, and increase the usefulness of portable digital devices of all kinds -- all to the benefit of the American Public.

In the foregoing circumstances, and those described in the Hauppauge and Dell/LG Petitions, Commission refusal to grant the waivers requested would disserve the public interest and be contrary to good regulatory policy.

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¹⁵ Even NTIA, in making available the much ballyhooed "converter boxes," did so both with and without "analog pass-through capability" (http://www.ezdigitaltv.com/Analog_Pass-Through.html). Significantly, the FCC never claimed that the *DTV only converters* violated the rule or the All Channel Receiver Act, even though the converters were TV reception devices under Section 15.3(w) and many lacked any means of analog reception.

Hauppauge!

EXHIBIT 1

DECLARATION OF KENNETH PLOTKIN

I, Kenneth Plotkin, CEO of Hauppauge Digital, Inc., the parent company of Hauppauge Computer Works, Inc., hereby declares as follows:

1. I am the principal corporate officer with knowledge of the matters discussed in the foregoing Comments of Hauppauge Computer Works, Inc. submitted in MB Docket No. 10-111 and the statements of fact therein are true and correct to the best of my knowledge and belief.

2. Since 1991, Hauppauge Computer Works has been designing and manufacturing, plus developing the operating software for, personal computer (PC) based TV tuner plug in computer circuit boards and external TV tuner USB devices (sometimes referred to as "dongles"). The "plug-in" boards are printed circuit cards which, when inserted into a PC with operating software loaded from a CD-ROM, allow users to watch and record television programs on their PC screen. The external USB TV tuner devices have the same function and operation as the internal printed circuit cards, but can be removed for portability. Both the internal printed circuit cards and the external USB devices are essentially TV tuners with a video digitizer or digital TV demodulator. Without the loading of the operating software into the PC, however, these TV tuner devices cannot function. Both the TV tuner device and the operating software need to be installed by an end user who, in addition, must have a PC and monitor as well. Traditionally, our customers have been sophisticated computer users who desire to build their own PC media centers for any number of personal uses; these same customers, of course, also purchase television sets in the general market as does the public at large.

3. More recently, Hauppauge has introduced, and is developing, a new line of digital TV tuners designed for the *portable* market which is expected to see demand increase in coming months and years. Based on the ATSC M/H Mobile TV A/153 standard, these digital TV tuners are being designed as both internal printed circuit cards and external USB devices. These digital TV tuners are designed to be included in cell phones, personal digital assistants, notebooks and netbooks, and laptop computers, as well as sold as after market USB digital TV tuners.

4. Thus, Hauppauge manufactures components using different implementations of a digital TV receiver. Some digital receiver components are small printed circuit boards with a tuner and digital TV demodulator; some digital receiver components are designed into a complete finished digital TV receiver; and others are external digital TV tuner "dongles" which also have a tuner and demodulator inside a plastic case. But, the essential characteristics which differentiate a portable (or mobile) digital TV receiver from a fixed digital TV receiver are:

- fixed digital TV receivers are line powered (plugged into a wall power socket) while mobile digital TV receivers can be stand alone and portable due to their internal battery power; and
- mobile digital TV receivers use small portable antennas, while fixed TV receivers either use more powerful roof top antennas or are connected to cable TV lines or satellite dishes.

5. While the use of internal digital TV tuner modules in portable devices such as cell phones is easily understood, the use of external USB TV tuner devices has a similar but not as well understood usage model. USB based digital TV tuner modules are primarily used by PC users who are mobile and want to watch live broadcast TV when they travel. We call this the 'Starbucks' model: a mobile PC user goes to a coffee shop, they open their laptop or notebook computer to check e-mail or surf the net, and they plug in a USB digital TV tuner so that they can watch live broadcast TV on their notebook screen. The Hauppauge USB digital TV tuner devices are designed to meet this consumer use. The requirements for a USB TV tuner module are the same as internal digital TV tuner modules: they need low power to extend the battery life of the notebook computer, they need to be small in size to make them easier to carry and they need to support a small portable TV antenna. Hauppauge Computer has under development a new line of digital only USB TV tuners which meet these requirements.

6. The essence of Hauppauge's position in this proceeding is that digital TV receivers, or the TV tuner components of a digital TV receiver (whether internal or external), which are primarily battery powered and designed for nomadic use, should be exempt from the requirement in FCC Rule 15.117 that analog TV tuners be included in such devices. There are numerous reasons why this should be the case:

- So far as Hauppauge is aware, there is no analog *mobile* TV transmission standard similar to ATSC A/153 and, thus, analog reception in a mobile environment is essentially unworkable;
- A requirement for an analog tuner would increase both the size and cost of the portable device to the point that marketability would be significantly constrained;
- Analog receivers are power-hungry and thus a severe disadvantage in terms of battery life of the portable device; and
- Analog tuners cannot use the digital TV antennas which are being designed into the digital only TV tuner USB devices. Requiring analog TV tuners would mean the built-in antenna technology could not be used.

The market for the new *mobile* TV technology which the American consumer is already indicating will be in significant demand, should not be hampered by undesirable and unnecessary add-ons that serve no real purpose. And, in this regard, it is critical to meeting expected demand by the American consumer that such new products be available for importation, distribution and sale prior to the third quarter of 2010.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed this 1st day of June 2010.

